

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

23-2282

IN RE: PEN

APPLICATION SERIAL NO.: 16/104,878
FILED: AUGUST 18, 2018
FOR: TRUE NANOSCALE ONE AND TWO-DIMENSIONAL
ORGANOMETALS CONTINUATION

Appeal from the United States Patent and Trademark Office
Patent Trial and Appeal Board
Appeal No. 2022-001764

OPENING BRIEF OF APPELLANT

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November 24, 2023

CERTIFICATE OF INTEREST

Appellant The Pen, representing himself pro se certifies the following:

1. The full name of every party represented by me is:

The Pen (the full legal name of a natural person)

2. The name of the real party represented by me is:

The Pen

3. All parent corporations and any publicly held companies that own 10 percent of more of the stock of the parties represented by me are:

None

4. The names of all law firms and the partners and associates that have appeared for the party in the proceedings below or who are expected to appear for the party in this Court and who are not already listed on the docket for this case:

None

Dated: November 24, 2023

/s/ The Pen
The Pen
Appellant Pro Se

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STATEMENT OF RELATED CASES

Pursuant to Federal Circuit Rule 47.5, Appellant The Pen pro se states that no appeal from the Patent Trial and Appeal Board proceedings at issue in this appeal was previously before this Court or any other appellate court. There are no cases known to appellant that will directly affect or be directly affected by this Court's decision in this appeal.

JURISDICTIONAL STATEMENT

This is an appeal of a final written decision by the Patent Trial and Appeal Board (“PTAB”) of the United States Patent and Trademark Office, which affirmed a rejection of utility patent claims. This Court has jurisdiction over the appeal under 35 U.S.C. § 329 and 28 U.S.C. § 1295(a)(4)(A).

STATEMENT OF THE ISSUES

1. Did the PTAB err by resting its decision on and following cases with facts wholly inapposite to the facts of this case related to 35 U.S.C. § 112(a)?
2. Did the PTAB err by trying to limit the scientific definition of the word “polymer” related to 35 U.S.C. § 112(a)?
3. Did the PTAB err by failing to critically examine whether any purported required experimentation is “undue” related to 35 U.S.C. § 112(a)?

STATEMENT OF THE CASE

Appellant The Pen (“Pen”) appealed the final rejection of the current patent application 16/104,878 (filed on August 8, 2018.) to the Patent Trial and Appeal Board (“PTAB”) which issued an opinion on June 7, 2023. The PTAB ruled in Pen’s favor on the first ground of rejection before them. Unfortunately, their opinion on the second ground of rejection was based on *sua sponte* citations and *sua sponte* arguments which could easily have been rebutted if they had been made prior to the issuance of the opinion itself. Pen by the appeal now to this Court simply seeks the gracious opportunity to make that compelling rebuttal now.

It is relevant to the proper consideration of these issues to consider also proceedings in the virtually identical parent application 14/738,829 ("the ‘829 application") filed on June 13, 2015, of which the current application is a continuation-in-part. [Appx041.]

In the parent ‘829 application, Examiner found that the claims at issue were allowable "in proviso" if only Pen were to clarify certain details in the specification. [Appx231-32.] Because this could only be done by filing a new continuation specification, Pen decided to appeal to the PTAB.

Regardless, Examiner found that Pen had overcome US 20100305288 (*He et. al.*), the only competing reference, which disclosed a short repeating structure of

oligomeric¹ subunits, incorporating sulfur atoms, in certain positions. [Appx231-232.] It is important to note that the claims had already been amended, without objection, to clarify that Pen was seeking to patent a polymer with more than 8 repeating subunits. [Appx225-226, claims 1, 21 & 22.]

Tragically, in perhaps one of the most cruel procedural readings ever, that attempted appeal was dismissed because Pen accidentally tendered the wrong forwarding fee. [Appx236.] Pen found to his horror that it was jurisdictional. A petition seeking relief was denied. [Appx238.] Pen was seemingly left with no real, viable option but to file the current application to continue to pursue claims of his invention. In an abundance of caution, Pen included additional options for the size of the polymer, including one ("at least 50 repeating units") consistent with the most authoritative scientific definition he could find. [Appx070, claim 24]; [Appx221.]

In response to the current application, Examiner then demanded a new restriction of the claims, contending for example that the form of the invention incorporating nitrogen atoms (claim1) and the form with some other atom in the same position (claim 22) were different inventions. [Appx083.] Pen was

¹ In scientific parlance, an oligomer is considered to be a relatively short structure of polymerized subunits. See Request For Judicial Notice Of The Scientific Definition of Polymer, *infra*.

procedurally forced to make the election to pursue only independent claim 1 (and its dependencies) in this regard. [Appx087.] This of course at the same time necessarily made the *He* prior art (US 20100305288) entirely irrelevant for allowance consideration purposes.

In the first office action as to the current application, examiner made some additional cosmetic objections about the claims regarding the "n" and "x" numbers, even while acknowledging he knew what was meant. [Appx094.] In any case, Pen dutifully amended the claims yet again to conform to examiner's requirements.

In response, Examiner then issued a final rejection with additional objections to these same, essentially identical claims, reaching all the way back to those of the parent '829 application.² For the very first time examiner objected that the "R" groups in the figures were not defined. This despite the fact that the claims expressly state that the "R" could be "anything." [Appx067, claim 1, for example.] For the first time examiner argued that the synthesis details in the specification were not adequate. [Appx144-145.] Pen then appealed to the PTAB as to the current application.

In its subsequent opinion, the PTAB cited *sua sponte* two new cases not

² It is theoretically possible that Pen could have petitioned the Commissioner of Patents to object to these much belated objections, but surely Pen is not precluded from arguing their lack of merit here.

argued in the briefing³, one only very recently decided by the Supreme Court, *Amgen Inc. v. Sanofi*, and long after the briefing. [Appx007-8.] These cases stand for the proposition that where it cannot be known *a priori* whether particular variations of a compound will be functional at all, those variations cannot be claimed. This was an argument not made by examiner. With regards to the "n" number of repeating units in the invention, the PTAB complained that the number might be unlimited. [Appx008, last line.] Again, this was an argument not made by examiner. Pen then appealed to this Federal Circuit in the instant appeal.

³ For his part, examiner cited no actual cases at all in his answer to the PTAB. [Appx179.] Examiner simply twice pasted in the text of his final rejection of 1/8/21. [Appx 141.]

SUMMARY OF THE ARGUMENT

The decision below is based on a fundamental misreading of applicable precedent on the question of 35 U.S.C. § 112(a) enablement as it relates to the facts of this case. In the first instance the PTAB followed decisions that turned on whether variations in the final product of an invention could be predictably functional, wholly inapposite to the facts of this case where the functionality (conductivity) of all final products is a certainty by the basic science involved.

In the second instance, the opinion of the PTAB betrays a fundamental misunderstanding of the scientific definition of the word "polymer," contending that Pen cannot claim as enabled a molecule of potentially unlimited length, when that is precisely what a polymer is, as understood by those skilled in the art.

In the third instance, the PTAB accepted at face value examiner's endlessly redundant assertions that Pen's invention required "undue experimentation" without critically assessing according to clear precedent what the test is for whether any possible required experimentation would be "undue" or not; and further by allowing examiner to wholly misrepresent the facts of this case as to Pen's disclosure of starting material, reagents, catalysts, etc., provided both by identification in the specification itself and by the inclusion of literature references with further reaction condition details.

STANDARD OF REVIEW

This Court reviews the PTAB's factual determinations for substantial evidence and its legal determinations de novo. *In re Nuvasive, Inc.*, 842 F.3d 1376, 1379 (Fed. Cir. 2016). Because the PTAB referenced an *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). analysis without actually doing one for the record, it is not clear if they made any factual findings. But if they just accepted examiner's categorical misstatement of the facts of the specification regarding starting material, reagents, catalysts, etc., despite Pen's clear protestations, this was clearly erroneous. [Appx195.]

Enablement under 35 U.S.C. § 112(a) is a question of law based on underlying factual findings. *In re Morsa*, 713 F.3d 104, 109 (Fed. Cir. 2013); *In re Antor Media Corp.*, 689 F.3d, 1282, 1287 (Fed. Cir. 2012). The PTAB made no apparent factual finding as to whether any possible "R" group variations were critical for the functionality of the final product, but in any case applied the incorrect legal standard for its own *sua sponte* citations of *Amgen Inc. v. Sanofi*, 598 US 594, 143 S.Ct. 1243, 1254 (May 18, 2023), and *In re Wright*, 999 F.2d 1557, 1561-62 (Fed. Cir. 1993).

ARGUMENT

1. REQUEST FOR JUDICIAL NOTICE OF THE SCIENTIFIC DEFINITION OF POLYMER

For proper consideration of this case, we must agree on a scientific definition of the word "polymer," because both examiner and the PTAB in turn have issued rejections as to length. For the examiner, not long enough, for the PTAB, too long.

Pen respectfully requests that the Court take judicial notice of the following defining resources, based on Rule 201 of the Federal Rules of Evidence, or alternatively based on the inherent equitable authority of the federal courts of appeals.

Long ago, during consideration of the parent '829 application, Pen tendered the most authoritative scientific definition he could find. [Appx221.] The Polymer Science Dictionary distinguishes the words "oligomer" and "polymer" as follows:

Definition of Oligomer: "A polymer with only a few repeat units in each polymer molecule, i.e. having a degree of polymerization up to a value of 10-20 units . . . In contrast, a polymer is often considered to contain at least 50 repeating units, and unlike an oligomer, removal of one or a few units makes no difference in its properties." *Polymer Science Dictionary*, by M. Alger, second edition, Chapman and Hall, 1997, Library of Congress catalog card number 96-86111, on page 350.

Let us kindly note that there are generally lower limits on length as

these terms are defined. But there is no upper limit. For once conditions are created for a polymerization reaction there is nothing to stop it until all starting material subunits (known as monomers) are consumed.

At the moment, a Google search for "scientific definition of polymer" returns <https://www.snexplores.org/article/explainer-what-are-polymers> at the top, which states the following: "Polymer chains can include hundreds of thousands of atoms — even millions." and "Polymers don't have a definite length." All we can know about these molecule is that they are large.

II THE *SUA SPONTE* CITATIONS OF THE PTAB ARE WHOLLY INAPPOSITE TO THE FACTS OF THIS CASE

On the new question of the identification of the "R" groups, the PTAB elected to cite it's own cases, *Amgen Inc. v. Sanofi*, 598 US 394, 143 S.Ct. 1243, 1254 (May 18, 2023), and *In re Wright*, 999 F.2d 1557, 1561-62 (Fed. Cir. 1993).

Simply stated, these cases are wholly inapposite to the facts of this case, because whereas the structural variations in those cases implicate whether the final product will be functional at all, in this application the "R" groups cannot have any conceivable impact on the core functional objective.

which is electrical conductivity. Examiner never argued that the conductivity of the final product was a function of any "R" group.

In *Amgen*, there was a broad claim for a "vast" family of antibodies that Amgen had not themselves tested for functionality. *Amgen* at 1256. As to Amgen's proposed procedure the Supreme Court wrote:

"These two approaches amount to little more than two research assignments. The first merely describes step-by-step Amgen's own trial-and-error method for finding functional antibodies—calling on scientists to create a wide range of candidate antibodies and then screen each to see which happen to bind to PCSK9 in the right place and block it from binding to LDL receptors. See Part I–B, *supra*; 987 F.3d, at 1088; 2019 WL 4058927, *10–*13. The second isn't much different. It requires scientists to make substitutions to the amino acid sequences of antibodies known to work and then test the resulting antibodies to see if they do too—an uncertain prospect given the state of the art. See Parts I–A, I–B, *supra*; 987 F.3d, at 1088; 2019 WL4058927, *10–*13" *Amgen* at 1256.

Exactly likewise with *In re Wright*, where the court found:

"Both the Examiner and the Board correctly pointed out that Wright's appealed claims are directed to vaccines, and methods of making and using these vaccines, which must by definition trigger an immunoprotective response in the host vaccinated; mere antigenic response is not enough. Both also correctly pointed out that Wright attempts to claim in many of the appealed claims any and all live, non-pathogenic vaccines, and processes for making such vaccines, which elicit immunoprotective activity in any animal toward any RNA virus. In addition, both properly stressed that many of the appealed claims encompass vaccines against AIDS viruses and that, because of the high degree of genetic, antigenic variations in such viruses, no one has yet, years after his invention, developed a

generally successful AIDS virus vaccine." *In re Wright* at 1562.

So again, in that case, there was a claim for a vast category of all conceivable variations, without any evidence that any of them might actually work in the end.

In stark contrast, the functionality of Pen's invention has no conceivable dependence on any peripheral "R" group. As explained in the specification, in discussing the improvement over conventional polypyrrole represented by the invention:

“Leaving aside the influence of metal atoms for just a moment, if one hoped to create a conducting solely organic polymer, single atoms bonds are too free to twist, making the pi-transfer of electrons through an otherwise **conjugated chain of alternating single and double bonds** imperfect. The point of ladder polymers is to lock the polymer chain in a ribbon-like plane for full conjugation. But anywhere in such a structure that a benzene moiety can be looked at in isolation this becomes an electronic sticking point that is happy being its own island of resonance. But by incorporating more nitrogen atoms in particular into ladder polymer structures, by the method of this invention we can achieve more facile pi-electron conjugation.” (Emphasis supplied.) [Appx049, lines 7-16.]

There is no scientific way any "R" group attached to any of the nitrogen atoms in the structure could have any possible impact on such conductivity. By definition an "R" is its own terminus. Even if electrons were to theoretically seek to propagate up through an "R" group, they could pass no further. Rather, the conductive function of the **final product** is wholly dependent the common core

feature of the structure of "conjugated chain of alternating single and double bonds," Accordingly, both the *Genetech* and *In re Wright* cases, where the final functionality was unpredictable, are wholly inapposite to the facts of this case.

The PTAB also cited *Genentech, Inc. v. Novo Nordisk*, 108 F.3d 1361, 1362 (Fed. Cir. 1997), but apparently only for the purpose of bringing in some quoted language from *In re Wright*. If this Court is interested, we can discuss *Genentech* further in The *Wands* Factors section *infra*.

III. THE PTAB FOUND THAT A CONDUCTIVE POLYMER CAN BE PATENTED ONLY AS LONG AS IT IS NOT A "POLYMER"

The PTAB made another *sua sponte* argument not made by examiner. They had a problem that there is "no upper limit to the number of repeating units" in Pen's invention. [Appx008, last line.]

Well . . . of course not . . . By scientific definition, of which Pen has respectfully asked this Court *supra* to take judicial notice, any polymer is of potentially unlimited length. As explained in the specification, "one skilled in the art should recognize that the chains will continue to extend until the starting material is consumed." [Appx055, lines 15-17.] That is, the PTAB's complaint is not against Pen, but instead against the science of polymerization itself.

What Pen attempted to do for the occasion of filing the current continuation-in-part was to give examiner every reasonable path to an allowance. Pen had already used the "more than 8" language all the way back in the parent '829 application, without objection to that amendment at that time by examiner, and was promised an "in proviso" allowance then. That language persists in the current claim 1. In current claim 10, the language "at least 50 repeating units" is incorporated. This is nothing more than consistency with the most authoritative definition of what a polymer is. Request for Judicial Notice of the Scientific Definition of Polymer, *supra*. It is essentially redundant.

Claim 1 included the descriptor "long chain" as to the polymer, again going all the way back to last amendment of the parent '829 application, again without objection from examiner. [Appx225.] This too is essentially just redundancy. The plain fact is that the word "polymer" standing alone has said it all from the very beginning. The only reason any of these amendments were made was in a valiant-attempt to work with the examiner. For its part, the PTAB rejected on the basis that the conductive polymer might be too long . . . which is to say . . . a "polymer."

IV. THE WANDS FACTORS ALSO FAVOR APPELLANT

The PTAB gave examiner credit for a "detailed discussion of the *Wands*

factors" though examiner did not actually cite the *Wands* case itself. [Appx006.] *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). But even if examiner had done so, he cannot just wave a *Wands* case and automatically prevail.

The PTAB neither enumerated the *Wands* factors themselves for the purpose of discussion, and most importantly, nor did they even acknowledge Pen's multiple citations of case law on the various points raised. [Appx 157-58]; [Appx195]⁴. In any case, if this Court is inclined to hear further discussion on this Pen is prepared to accommodate this now. As summarized by MPEP 2164, the *Wands* factors are:

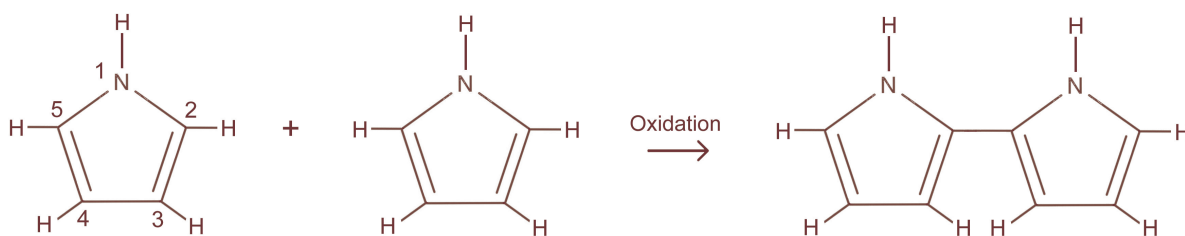
- (A) The breadth of the claims;
- (B) The nature of the invention;
- (C) The state of the prior art;
- (D) The level of one of ordinary skill;
- (E) The level of predictability in the art;
- (F) The amount of direction provided by the inventor;
- (G) The existence of working examples; and
- (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

Examiner argued on "breadth of claims" and "nature of the invention" that fact that the "R" groups could be anything would require "undue experimentation." [Appx181.] So this is really a *Wands* H) argument, and arbitrary boilerplate at

⁴ The reason some of these arguments are in Pen's opening brief before the PTAB and not in his reply to examiner's answer is because there was really nothing new in the answer, just two pasted in copies of examiner's last final rejection.

that. This led the PTAB on the wrong path to *sua sponte* make what their cases in fact identify as a final product functionality argument. But we might as well get a head start here on the experimentation to "make" the invention question.

Just as any possible "R" groups do not participate in the electrical conductivity function of the final product, neither do they enter into the chemistry of the synthesis of the product, which is based on two things only. [Appx156-157.] The first is the fact that it is a well known reaction that pyrroles polymerize under oxidizing conditions at the number 2 position⁵, which is to say at one of the carbon atoms next to the nitrogen atom. So the first step in such polymerization is that two pyrrole monomers are linked like so (omitting for this most basic example any peripheral groups):



⁵ This is familiar ground for one skilled in the art of organic synthesis, but for the edification of this Court, "oxidation" in this context means to remove hydrogen atoms and to form new bonds instead between carbon atoms and some other atom besides hydrogen in their place. Pen proactively asks the Court's forgiveness if any of this sounds like a chemistry lesson, but the basics must be understood.

In the figure above, by convention the nitrogen is numbered 1 in each starting 5-membered ring, with the atoms numbered 2-5 being the carbon atoms. This reaction is so facile that it is prone to take place under a large range of reagents and oxidizing reaction conditions. In the specification, Pen gave at least four of the most common known to those skilled in the art, complete with literature references including solvents, etc.

“Then under acidic conditions this can be electrochemically oxidized [as for standard polypyrrole, *Synthetic Metals*, 2014, 191, 104] and/or chemically oxidized by FeCl_3 [Chem Commun, 2012, 48, 8246; *J Phys Chem B*, 2005, 109, 17474; US 5,855,819], or ammonium persulfate [*Journal of Physics: Conference Series*, 2009, 187, 012050], etc., to polymerize to the desired end product.” [Appx 049.]

and

It is already known that Ag^+1 ions will oxidize and polymerize pyrrole. [Synthetic Metals, 2013, 166, 57] We can use silver in this way, or alternatively Cu^+2 which is close to the silver ion in reduction potential, or even Cu^+1 , or Ag^+2 from silver (II) oxide, which is thought to consist of one silver atom in the +1 oxidation state and one in the +3, and a strong oxidizer for this reason. [Appx 051.]

The sheer fact that this is a polymerization is another marker of how facile this reaction is under any of these conditions. After the first two monomers link up, the chain continues to grow in both directions indefinitely. Even assuming there were any “R” groups attached to the nitrogen atoms they simply don’t

participate in this stage of the polymerization reaction⁶. They just don't matter. If anything they are an afterthought. \

The second and concurrent step in the polymerization takes place in this invention, and this is Pen's key innovation, when there are amines in the 3 and 4 positions of the starting pyrrole. As explained to the PTAB:

“At this point one skilled in the art would know one of the amines in the 3 or 4 position would be oxidized to a conjugated imine, a highly reactive functional group that could not help but participate in a substitution reaction with an adjacent and perfectly positioned amine substituent, especially under the catalyzing acidic conditions specified by applicant.” [Appx156.]

These individual steps are well known chemistry, and not at all something anyone would have to exercise undue experimentation to achieve given the ample references of conditions and solvents provided.

At this point examiner's answer to the PTAB goes completely off the rails on the question of state of the prior art, arguing that “no prior art has shown enablement to produce the claimed polymer” exactly. [Appx181.]

Well . . . of course not . . . If so, Pen would not have much of an “invention” at all, now would he? Examiner's argument makes no logical sense whatsoever.

⁶ Since the basic chemistry of nitrogen is to naturally form three bonds to other atoms, in this case at a minimum there would be one hydrogen as an R group, as in the primary given starting material, pyrrole,3,4-diamine. [Appx049.]

On the question of “level of ordinary skill,” examiner starts to blindly misrepresent the facts of this case, claiming that the specification is silent on “monomer, solvent, catalyst, etc.” What is the given pyrrole,3,4-diamine if not a starting material monomer? [Appx049.] What are electrochemical oxidation, FeCl_3 , ammonium persulfate, Ag^+ ions, acidic catalyzing conditions in the range of 2-5 pH, if not reagents and catalysts, including all the relevant associated literature references giving the optimum solvents and other reaction parameters required? [Appx 049-051.]

On “predictability in the art,” no serious person skilled in the art would doubt that pyrrole,3,4-diamine would at least polymerize as far as would standard pyrrole. Neither is the concurrent amine substitution a stretch. Such amine substitution is a well known reaction standing alone. In particular, one skilled in the art would know that 5 membered ring formation is highly favored, which is what completes the ladder structure here. And where, as here, you have atoms perfectly positioned to close such rings all the more so. And on top of that, this is especially so where there is extended conjugation of alternating single and double bonds, with a strong driving force towards such a structure as known by those skilled in the art. If none of this were true, Fukazawa could never have achieved even as much as they did.

At this point, on the last 3 *Wands* factors, examiner just drops into broken record mode on “undue experimentation.” But worse than that, kindly witness this closing argument from both the final rejection and examiner’s answer to the PTAB:

“The quantity of experimentation needed to achieve the claimed melt index via polycarbonate appears infinite, because no specific polymer has been indicated to be used. Therefore, the instant specification is insufficient, coupled with information known in the art, to inform one of ordinary skill in the art how to make and use the claimed invention without undue experimentation.” [Appx145]; [Appx183.]

There is no “melt index” in Pen’s specification . . . There is no “polycarbonate” to be found anywhere . . . Is there a polite and respectful way to call this out for the irrelevant nonsense it is? Most of this from examiner is just perfunctory boilerplate pasted in from some unknown and unrelated source, and has nothing to do with Pen’s actual specification or invention.

The key holding from *Wands* is that any experimentation cannot be “undue.”⁷ *Wands* at 737. With all the guidance as to starting material, conditions, etc., demonstrated above, surely Pen’s specification meets the bar here.

⁷ Pen made this same point in his opening brief to the PTAB, citing *In re Angstadt*, 537 F.2d 498, 504, 190 USPQ 214, 219 (CCPA 1976). [Appx157.]

V. OTHER CASES ON ENABLEMENT FAVOR APPELLANT

Let us quickly touch on other controlling cases on enablement, including those already cited to the PTAB by Pen. But first, as promised, let's return to *Genentech, Inc. v. Novo Nordisk*, since the PTAB also cited it, at least as a bridge to *In re Wright*.

Genentech lost their case because “the specification does not describe a specific material to be cleaved or any reaction conditions under which cleavable fusion expression would work.” *Genentech* at 1365. The exact opposite is the case here, where the key starting material is not only specified, but a synthetic route to even that is provided, using all known reaction standard conditions. [Appx049-50.] Moreover, the literature references already cited and the specification itself give all the rest of the reaction conditions as already demonstrated.

Perhaps it is fitting that *Genentech* also cites at 1366 the case of *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, one of the very cases Pen cited to the PTAB in his opening brief there on the same point Pen was making. From MPEP 2164.01:

“A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802

F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984).” [Appx157.]

Genentech goes on to reiterate that “when there is no disclosure of any specific starting material or of any of the conditions under which a process can be carried out, undue experimentation is required.” *Genentech* at 1366. None of this can be fairly said about Pen’s disclosure.

CONCLUSION

In short, it seems the PTAB failed to even consider any of Pen's case citations and incorporated points of law, and instead tendered their own, which as it turns out are wholly inapposite on the facts.

Under these circumstances, Pen respectfully submits their decision mailed 6/7/2023 should be reversed as to the second ground for rejection.

Dated: November 24, 2023

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CERTIFICATE OF SERVICE

I certify that I served a copy of this Opening Brief of Appellant on counsel of record on November 24, 2023 by electronic means (CM/ECF), together with a joint appendix opposing counsel graciously assembled and provided for me, also being filed herewith.

Dated: November 24, 2023

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CERTIFICATE OF COMPLIANCE

I hereby certify that this brief complies with the applicable type-volume limitations because it contains 5,374 words, including title page, tables, all content and certificates. This certificate was prepared in reliance on the word-count function of the word-processing system (Corel WordPerfect 8.0) used to prepare this brief.

I further certify that this brief complies with the typeface and type style requirements of Federal Rule of Appellate Procedure 32(a)(5) and 32(a)(6) because it has been prepared in a proportionally spaced typeface using Corel WordPerfect 8.0 in 14-point Times New Roman font.

Dated: November 24, 2023

/s/ The Pen
The Pen
Appellant Pro Se